## Rymer, Edwina

From: Dellinger, Philip

Sent: Wednesday, August 13, 2014 10:46 AM

To: R6 6WQ-SG

**Subject:** FW: EARTHQUAKES: Texas looking for compromise on fracking-earthquake rules

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From: Casso, Ruben

Sent: Wednesday, August 13, 2014 8:12 AM

To: Lawrence, Rob; Dellinger, Philip

Subject: EARTHQUAKES: Texas looking for compromise on fracking-earthquake rules

## **EARTHQUAKES: Texas looking for compromise on fracking-earthquake rules**

Mike Lee and Mike Soraghan, E&E reporters

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The Texas oil and gas industry yesterday signaled its openness to proposed state rules that would allow disposal wells to be shut down if they're suspected of causing earthquakes.

Reviews from environmental groups and were mixed, but they applauded the Texas Railroad Commission for taking action on the issue of quakes linked to drilling.

The commission, whose three members are elected statewide, approved a draft of the rules yesterday after months of questioning scientific studies that show a link between earthquakes and oil and gas operations.

If given final approval, the rules would require companies to do a seismic survey before they get permits for new disposal wells, which are used to get rid of wastewater from oil and gas production. The Railroad Commission, which regulates oil and gas production, would have more authority to ask for data on disposal wells. The commission would also be able to shut down wells or modify their permits if they're "suspected of or shown to be causing seismic activity" (*Greenwire*, Aug. 12).

Texas' powerful oil and gas lobby hinted that it was happy with the commission's solution.

"The Texas oil and natural gas industry itself is taking the issue very seriously, has heightened its focus on disposal wells, and is taking proactive steps to mitigate risk related to seismic activity," Deb Mamula, executive vice president of the Texas Oil and Gas Association, said in a statement.

The Texas Alliance of Energy Producers, which represents the state's independent producers, has been urging the Railroad Commission to study the link between earthquakes and oil and gas activity to make sure any regulation is done right, the *Fort Worth Star-Telegram* reported.

The Environmental Defense Fund called the rules "prudent" and "much needed" and said they could serve as a model for other states.

"Any state that thinks it might have a problem with induced seismicity may well benefit by doing what Texas is doing here," said Scott Anderson, a senior policy adviser in EDF's Texas office.

Other environmentalists said the rules leave too many gaps. For example, Briana Mordick, a scientist at the Natural Resources Defense Council, said oil and gas officials can't look only at where earthquakes have occurred in the past.

"As we've seen around the U.S., induced earthquakes have been occurring in states like Arkansas, Colorado, Ohio, Oklahoma and Texas where natural earthquakes don't occur very often," she said.

Sharon Wilson, an organizer with the environmental group Earthworks, pointed out that the rules don't appear to include penalties.

"They are neither identifying instances where specific earthquakes have occurred nor holding the responsible party liable for damages caused to property owners," Wilson said.

## Induced seismicity still in question

More than 30 earthquakes struck the area near Azle, Texas, about 20 miles north of Fort Worth, between November and January. None of the quakes was strong enough to do major damage, but residents urged the Railroad Commission to shut down a group of disposal wells used to inject wastewater from gas production. About 850 people turned out for a meeting with commission staffers in January (*EnergyWire*, Jan. 3).

Researchers from the U.S. Geological Survey and Southern Methodist University have been studying the earthquakes, although they haven't published their conclusions.

Scientists have known for years that injecting fluid underground can cause geological faults to slip, triggering earthquakes. Hydraulic fracturing isn't believed to cause most earthquakes directly, but it creates large volumes of wastewater.

The commission initially said it didn't have the legal authority to shut down disposal wells, even if they were linked to earthquakes. It hired a seismologist, David Craig Pearson, in March, and a state legislative committee held a hearing on the issue in May.

Oklahoma officials have begun a "traffic light" system for dealing with earthquakes near disposal wells. They limited injection last year at one well (the "yellow light"), which then halted operations. Ohio officials enacted a series of regulations after an injection well was linked to earthquakes around Youngstown. Arkansas banned injection in a broad swath of the state after injection was linked to an earthquake "swarm."

A Texas Railroad Commission spokeswoman declined to make any staffers available for an interview, and commission Chairwoman Christi Craddick didn't respond to an interview request.

In a written response, commission spokeswoman Ramona Nye said the agency still questions some of the scientific findings on induced seismicity.

"Whether there is a definitive link or not between disposal wells and seismic activity in Texas has not been determined," Nye wrote. "We have seen a need for laying the groundwork for some basic industry best practices that are proposed in these rule amendments."

Azle Mayor Alan Brundrett said the proposal is a good compromise and was optimistic that the Railroad Commission would follow through in enforcing the rules.

"With all the publicity our problems have stirred up, I don't think they'll have a choice," he said.